



SEQUENCE LISTING

<110> Brooks, Peter  
Cheresh, David A.  
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<120> METHODS AND COMPOSITIONS USEFUL FOR INHIBITION OF  
ALPHA $\nu$ BETA5 MEDIATED ANGIOGENESIS

<130> MER0065S

<140> 09/194,552

<141> 1999-03-23

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<151> 1997-05-30

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<151> 1996-05-31

<150> 60/015,869

<151> 1996-05-31

<160> 43

<170> PatentIn Ver. 2.0

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

C<sup>1</sup>  
<220>

<223> Description of Artificial Sequence: Peptide

<220>

<221> PEPTIDE

<222> (1)..(5)

<223> BOC signifies the N-terminal protecting group  
butyloxycarbonyl; OMe signifies a C-terminal  
methyl ester; arginine in the first position.

<220>

<221> PEPTIDE

<222> (1)..(5)

<223> OMe signifies the C-terminal protecting group  
methyl ester.

<220>

<221> PEPTIDE

<222> (1)..(5)

<223> A prefix "D" in D-phe signifies that the  
phenylalanine in position 4 is a D-amino acid.

<400> 1

Arg Gly Asp Phe Val

1

5

<210> 2  
<211> 5  
<212> PRT  
<213> Artificial Sequence


<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> BOC signifies the N-terminal blocking group  
tertbutyloxycarbonyl.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> OH signifies a free C-terminal carboxylic acid.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> A prefix "D" in D-Phe signifies that the  
phenylalanine in position 4 is a D-amino acid.

<400> 2  
Arg Gly Asp Phe Val  
1 5

 <210> 3  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> H signifies a free N-terminal amine.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> OH signifies a free C-terminal carboxylic acid.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> A prefix "D" in D-phe at position 4, signifies  
that the phenylalanine is a D-amino acid.

<400> 3  
Arg Gly Asp Phe Val  
1 5

<210> 4  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Phe is a D-amino acid.

<400> 4  
Arg Gly Asp Phe Val  
1 5

<210> 5  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Phe is a D-amino acid.

<400> 5  
Arg Ala Asp Phe Val  
1 5

<210> 6  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(6)  
<223> Arg is a D-amino acid.

<400> 6  
Gly Arg Gly Asp Phe Val  
1 5

<210> 7  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Val is a D-amino acid.

<400> 7  
Arg Gly Asp Phe Val  
1 5

<210> 8  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<400> 8  
Tyr Thr Ala Glu Cys Lys Pro Gln Val Thr Arg Gly Asp Val Phe  
1 5 10 15

<210> 9  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE  
<222> (1)..(6)  
<223> N-methylated valine.

<220>  
<221> PEPTIDE  
<222> (1)..(6)  
<223> Phe is a D-amino acid.

<400> 9  
Arg Gly Asp Phe Asn Val  
1 5

<210> 10  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> PEPTIDE

<222> (1)..(5)  
<223> Phe is a D-amino acid.

<220>  
<221> PEPTIDE  
<222> (5)..(5)  
<223> N-methylated valine

<400> 10  
Arg Gly Glu Phe Val  
1 5

<210> 11  
<211> 222  
<212> PRT  
<213> Homo sapiens

<400> 11  
Lys Gly Ile Gln Glu Leu Tyr Gly Ala Ser Pro Asp Ile Asp Leu Gly  
1 5 10 15  
Thr Gly Pro Thr Pro Thr Leu Gly Pro Val Thr Pro Glu Ile Cys Lys  
20 25 30  
Gln Asp Ile Val Phe Asp Gly Ile Ala Gln Ile Arg Gly Glu Ile Phe  
35 40 45  
Phe Phe Lys Asp Arg Phe Ile Trp Arg Thr Val Thr Pro Arg Asp Lys  
50 55 60  
Pro Met Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Glu Leu Pro Glu  
65 70 75 80  
Lys Ile Asp Ala Val Tyr Glu Ala Pro Gln Glu Glu Lys Ala Val Phe  
85 90 95  
Phe Ala Gly Asn Glu Tyr Trp Ile Tyr Ser Ala Ser Thr Leu Glu Arg  
100 105 110  
Gly Tyr Pro Lys Pro Leu Thr Ser Leu Gly Leu Pro Pro Asp Val Gln  
115 120 125  
Arg Val Asp Ala Ala Phe Asn Trp Ser Lys Asn Lys Lys Thr Tyr Ile  
130 135 140  
Phe Ala Gly Asp Lys Phe Trp Arg Tyr Asn Glu Val Lys Lys Lys Met  
145 150 155 160  
Asp Pro Gly Phe Pro Lys Leu Ile Ala Asp Ala Trp Asn Ala Ile Pro  
165 170 175  
Asp Asn Leu Asp Ala Val Val Asp Leu Gln Gly Gly Gly His Ser Tyr  
180 185 190  
Phe Phe Lys Gly Ala Tyr Tyr Leu Lys Leu Glu Asn Gln Ser Leu Lys  
195 200 205

Ser Val Lys Phe Gly Ser Ile Lys Ser Asp Trp Leu Gly Cys  
 210 215 220

<210> 12  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<400> 12  
 Ile Cys Lys Gln Asp Ile Val Phe Asp Gly Ile Ala Gln Ile Arg Gly  
 1 5 10 15  
 Glu Ile Phe Phe Phe Lys Asp Arg Phe Ile Trp Arg Thr Val Thr Pro  
 20 25 30  
 Arg Asp Lys Pro Met Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Glu  
 35 40 45  
 Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ala Pro Gln Glu Glu Lys  
 50 55 60  
 Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp Ile Tyr Ser Ala Ser Thr  
 65 70 75 80  
 Leu Glu Arg Gly Tyr Pro Lys Pro Leu Thr Ser Leu Gly Leu Pro Pro  
 85 90 95  
 Asp Val Gln Arg Val Asp Ala Ala Phe Asn Trp Ser Lys Asn Lys Lys  
 100 105 110  
 Thr Tyr Ile Phe Ala Gly Asp Lys Phe Trp Arg Tyr Asn Glu Val Lys  
 115 120 125  
 Lys Lys Met Asp Pro Gly Phe Pro Lys Leu Ile Ala Asp Ala Trp Asn  
 130 135 140  
 Ala Ile Pro Asp Asn Leu Asp Ala Val Val Asp Leu Gln Gly Gly Gly  
 145 150 155 160  
 His Ser Tyr Phe Phe Lys Gly Ala Tyr Tyr Leu Lys Leu Glu Asn Gln  
 165 170 175  
 Ser Leu Lys Ser Val Lys Phe Gly Ser Ile Lys Ser Asp Trp Leu Gly  
 180 185 190

Cys

<210> 13  
 <211> 74  
 <212> PRT  
 <213> Homo sapiens

<400> 13  
 Ile Cys Lys Gln Asp Ile Val Phe Asp Gly Ile Ala Gln Ile Arg Gly  
 1 5 10 15

Glu Ile Phe Phe Phe Lys Asp Arg Phe Ile Trp Arg Thr Val Thr Pro  
                   20                                  25                                  30  
 Arg Asp Lys Pro Met Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Glu  
                   35                                  40                                  45  
 Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ala Pro Gln Glu Glu Lys  
                   50                                  55                                  60  
 Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp  
                   65                                  70

<210> 14  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 14  
 Ile Cys Lys Gln Asp Ile Val Phe Asp Gly Ile Ala Gln Ile Arg Gly  
                   1                                  5                                  10                                  15  
 Glu Ile Phe Phe Phe Lys Asp Arg Phe Ile Trp Arg Thr Val Thr Pro  
                   20                                  25                                  30  
 Arg Asp Lys Pro Met Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Glu  
                   35                                  40                                  45  
 Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ala Pro Gln Glu Glu Lys  
                   50                                  55                                  60  
 Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp Ile Tyr Ser Ala Ser Thr  
                   65                                  70                                  75                                  80  
 Leu Glu Arg Gly Tyr Pro Lys Pro Leu Thr Ser Leu Gly Leu Pro Pro  
                   85                                  90                                  95  
 Asp Val Gln Arg Val Asp Ala Ala Phe Asn Trp Ser  
                   100                                  105

<210> 15  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 15  
 Glu Tyr Trp Ile Tyr Ser Ala Ser Thr Leu Glu Arg Gly Tyr Pro Lys  
                   1                                  5                                  10                                  15  
 Pro Leu Thr Ser Leu Gly Leu Pro Pro Asp Val Gln Arg Val Asp Ala  
                   20                                  25                                  30  
 Ala Phe Asn Trp Ser Lys Asn Lys Lys Thr Tyr Ile Phe Ala Gly Asp  
                   35                                  40                                  45  
 Lys Phe Trp Arg Tyr Asn Glu Val Lys Lys Lys Met Asp Pro Gly Phe  
                   50                                  55                                  60

Pro Lys Leu Ile Ala Asp Ala Trp Asn Ala Ile Pro Asp Asn Leu Asp  
65 70 75 80  
Ala Val Val Asp Leu Gln Gly Gly Gly His Ser Tyr Phe Phe Lys Gly  
85 90 95  
Ala Tyr Tyr Leu Lys Leu Glu Asn Gln Ser Leu Lys Ser Val Lys Phe  
100 105 110  
Gly Ser Ile Lys Ser Asp Trp Leu Gly Cys  
115 120

<210> 16  
<211> 89  
<212> PRT  
<213> Homo sapiens

<400> 16  
Phe Asn Trp Ser Lys Asn Lys Lys Thr Tyr Ile Phe Ala Gly Asp Lys  
1 5 10 15  
Phe Trp Arg Tyr Asn Glu Val Lys Lys Lys Met Asp Pro Gly Phe Pro  
20 25 30  
Lys Leu Ile Ala Asp Ala Trp Asn Ala Ile Pro Asp Asn Leu Asp Ala  
35 40 45  
Val Val Asp Leu Gln Gly Gly Gly His Ser Tyr Phe Phe Lys Gly Ala  
50 55 60  
Tyr Tyr Leu Lys Leu Glu Asn Gln Ser Leu Lys Ser Val Lys Phe Gly  
65 70 75 80  
Ser Ile Lys Ser Asp Trp Leu Gly Cys  
85

<210> 17  
<211> 228  
<212> PRT  
<213> Gallus gallus

<400> 17  
Lys Gly Ile Gln Glu Leu Tyr Glu Val Ser Pro Asp Val Glu Pro Gly  
1 5 10 15  
Pro Gly Pro Gly Pro Gly Pro Gly Pro Arg Pro Thr Leu Gly Pro Val  
20 25 30  
Thr Pro Glu Leu Cys Lys His Asp Ile Val Phe Asp Gly Val Ala Gln  
35 40 45  
Ile Arg Gly Glu Ile Phe Phe Phe Lys Asp Arg Phe Met Trp Arg Thr  
50 55 60  
Val Asn Pro Arg Gly Lys Pro Thr Gly Pro Leu Leu Val Ala Thr Phe  
65 70 75 80

Trp Pro Asp Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ser Pro Gln  
                     85                    90                    95  
 Asp Glu Lys Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp Val Tyr Thr  
                     100                    105                    110  
 Ala Ser Asn Leu Asp Arg Gly Tyr Pro Lys Lys Leu Thr Ser Leu Gly  
                     115                    120                    125  
 Leu Pro Pro Asp Val Gln Arg Ile Asp Ala Ala Phe Asn Trp Gly Arg  
                     130                    135                    140  
 Asn Lys Lys Thr Tyr Ile Phe Ser Gly Asp Arg Tyr Trp Lys Tyr Asn  
                     145                    150                    155                    160  
 Glu Glu Lys Lys Lys Met Glu Leu Ala Thr Pro Lys Phe Ile Ala Asp  
                     165                    170                    175  
 Ser Trp Asn Gly Val Pro Asp Asn Leu Asp Ala Val Leu Gly Leu Thr  
                     180                    185                    190  
 Asp Ser Gly Tyr Thr Tyr Phe Phe Lys Asp Gln Tyr Tyr Leu Gln Met  
                     195                    200                    205  
 Glu Asp Lys Ser Leu Lys Ile Val Lys Ile Gly Lys Ile Ser Ser Asp  
                     210                    215                    220  
 Trp Leu Gly Cys  
 225

<210> 18  
 <211> 193  
 <212> PRT  
 <213> Gallus gallus

<400> 18  
 Leu Cys Lys His Asp Ile Val Phe Asp Gly Val Ala Gln Ile Arg Gly  
                     1                    5                    10                    15  
 Glu Ile Phe Phe Phe Lys Asp Arg Phe Met Trp Arg Thr Val Asn Pro  
                     20                    25                    30  
 Arg Gly Lys Pro Thr Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Asp  
                     35                    40                    45  
 Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ser Pro Gln Asp Glu Lys  
                     50                    55                    60  
 Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp Val Tyr Thr Ala Ser Asn  
                     65                    70                    75                    80  
 Leu Asp Arg Gly Tyr Pro Lys Lys Leu Thr Ser Leu Gly Leu Pro Pro  
                     85                    90                    95  
 Asp Val Gln Arg Ile Asp Ala Ala Phe Asn Trp Gly Arg Asn Lys Lys  
                     100                    105                    110

Thr Tyr Ile Phe Ser Gly Asp Arg Tyr Trp Lys Tyr Asn Glu Glu Lys  
 115 120 125  
 Lys Lys Met Glu Leu Ala Thr Pro Lys Phe Ile Ala Asp Ser Trp Asn  
 130 135 140  
 Gly Val Pro Asp Asn Leu Asp Ala Val Leu Gly Leu Thr Asp Ser Gly  
 145 150 155 160  
 Tyr Thr Tyr Phe Phe Lys Asp Gln Tyr Tyr Leu Gln Met Glu Asp Lys  
 165 170 175  
 Ser Leu Lys Ile Val Lys Ile Gly Lys Ile Ser Ser Asp Trp Leu Gly  
 180 185 190

Cys

<210> 19  
 <211> 74  
 <212> PRT  
 <213> Gallus gallus

<400> 19  
 Leu Cys Lys His Asp Ile Val Phe Asp Gly Val Ala Gln Ile Arg Gly  
 1 5 10 15  
 Glu Ile Phe Phe Phe Lys Asp Arg Phe Met Trp Arg Thr Val Asn Pro  
 20 25 30  
 Arg Gly Lys Pro Thr Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Asp  
 35 40 45  
 Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ser Pro Gln Asp Glu Lys  
 50 55 60  
 Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp  
 65 70

<210> 20  
 <211> 108  
 <212> PRT  
 <213> Gallus gallus

<400> 20  
 Leu Cys Lys His Asp Ile Val Phe Asp Gly Val Ala Gln Ile Arg Gly  
 1 5 10 15  
 Glu Ile Phe Phe Phe Lys Asp Arg Phe Met Trp Arg Thr Val Asn Pro  
 20 25 30  
 Arg Gly Lys Pro Thr Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Asp  
 35 40 45  
 Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ser Pro Gln Asp Glu Lys  
 50 55 60

Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp Val Tyr Thr Ala Ser Asn  
65 70 75 80

Leu Asp Arg Gly Tyr Pro Lys Lys Leu Thr Ser Leu Gly Leu Pro Pro  
85 90 95

Asp Val Gln Arg Ile Asp Ala Ala Phe Asn Trp Gly  
100 105

<210> 21  
<211> 122  
<212> PRT  
<213> Gallus gallus

<400> 21  
Glu Tyr Trp Val Tyr Thr Ala Ser Asn Leu Asp Arg Gly Tyr Pro Lys  
1 5 10 15

Lys Leu Thr Ser Leu Gly Leu Pro Pro Asp Val Gln Arg Ile Asp Ala  
20 25 30

Ala Phe Asn Trp Gly Arg Asn Lys Lys Thr Tyr Ile Phe Ser Gly Asp  
35 40 45

Arg Tyr Trp Lys Tyr Asn Glu Glu Lys Lys Lys Met Glu Leu Ala Thr  
50 55 60

Pro Lys Phe Ile Ala Asp Ser Trp Asn Gly Val Pro Asp Asn Leu Asp  
65 70 75 80

Ala Val Leu Gly Leu Thr Asp Ser Gly Tyr Thr Tyr Phe Phe Lys Asp  
85 90 95

Gln Tyr Tyr Leu Gln Met Glu Asp Lys Ser Leu Lys Ile Val Lys Ile  
100 105 110

Gly Lys Ile Ser Ser Asp Trp Leu Gly Cys  
115 120

<210> 22  
<211> 89  
<212> PRT  
<213> Gallus gallus

<400> 22  
Phe Asn Trp Gly Arg Asn Lys Lys Thr Tyr Ile Phe Ser Gly Asp Arg  
1 5 10 15

Tyr Trp Lys Tyr Asn Glu Glu Lys Lys Lys Met Glu Leu Ala Thr Pro  
20 25 30

Lys Phe Ile Ala Asp Ser Trp Asn Gly Val Pro Asp Asn Leu Asp Ala  
35 40 45

Val Leu Gly Leu Thr Asp Ser Gly Tyr Thr Tyr Phe Phe Lys Asp Gln  
50 55 60

Tyr Tyr Leu Gln Met Glu Asp Lys Ser Leu Lys Ile Val Lys Ile Gly  
65 70 75 80

Lys Ile Ser Ser Asp Trp Leu Gly Cys  
85

<210> 23  
<211> 2123  
<212> DNA  
<213> Gallus gallus

<220>  
<221> CDS  
<222> (132)..(2123)

<400> 23  
aattccggca aaagagaaaa cgggtgcagag agttaagatg tgcagataag caactagtgc 60  
actgtgcagc caaagtaact gacagtcagt cagagaaatc ttttaaagag gattgcaaaa 120

atataggcag a atg aag act cac agt gtt ttt ggc ttc ttt ttt aaa gta 170  
Met Lys Thr His Ser Val Phe Gly Phe Phe Phe Lys Val  
1 5 10

cta tta atc caa gtg tat ctt ttt aac aaa act tta gct gca ccg tca 218  
Leu Leu Ile Gln Val Tyr Leu Phe Asn Lys Thr Leu Ala Ala Pro Ser  
15 20 25

cca atc att aag ttc cct gga gac agc act cca aaa aca gac aaa gag 266  
Pro Ile Ile Lys Phe Pro Gly Asp Ser Thr Pro Lys Thr Asp Lys Glu  
30 35 40 45

cta gca gtg caa tac ctg aat aaa tat tat gga tgc cca aaa gac aat 314  
Leu Ala Val Gln Tyr Leu Asn Lys Tyr Tyr Gly Cys Pro Lys Asp Asn  
50 55 60

tgc aac tta ttt gta ttg aaa gat act ttg aag aaa atg cag aaa ttt 362  
Cys Asn Leu Phe Val Leu Lys Asp Thr Leu Lys Lys Met Gln Lys Phe  
65 70 75

ttt ggg ctg cct gaa aca gga gat ttg gat caa aac aca att gag aca 410  
Phe Gly Leu Pro Glu Thr Gly Asp Leu Asp Gln Asn Thr Ile Glu Thr  
80 85 90

atg aag aaa ccc cgc tgt ggt aac ccc gat gtg gcc aat tac aac ttc 458  
Met Lys Lys Pro Arg Cys Gly Asn Pro Asp Val Ala Asn Tyr Asn Phe  
95 100 105

ttt cca aga aag cca aaa tgg gaa aag aat cat ata aca tac agg att 506  
Phe Pro Arg Lys Pro Lys Trp Glu Lys Asn His Ile Thr Tyr Arg Ile  
110 115 120 125

ata ggc tat acc ccg gat ttg gat cct gag aca gta gat gat gcc ttt 554  
Ile Gly Tyr Thr Pro Asp Leu Asp Pro Glu Thr Val Asp Asp Ala Phe  
130 135 140

gcc cga gcc ttt aaa gtc tgg agt gat gtc acg cca ctg aga ttt aac 602  
 Ala Arg Ala Phe Lys Val Trp Ser Asp Val Thr Pro Leu Arg Phe Asn  
 145 150 155

cga ata aat gat gga gag gca gac att atg att aat ttt ggc cga tgg 650  
 Arg Ile Asn Asp Gly Glu Ala Asp Ile Met Ile Asn Phe Gly Arg Trp  
 160 165 170

gaa cat ggt gat ggc tat cca ttt gat ggc aaa gat ggt ctc ctg gct 698  
 Glu His Gly Asp Gly Tyr Pro Phe Asp Gly Lys Asp Gly Leu Leu Ala  
 175 180 185

cac gcc ttt gca ccg ggg cca gga att gga gga gac tcc cat ttt gat 746  
 His Ala Phe Ala Pro Gly Pro Gly Ile Gly Gly Asp Ser His Phe Asp  
 190 195 200 205

gat gat gaa ctg tgg act ctt gga gaa ggg caa gtg gtt aga gta aag 794  
 Asp Asp Glu Leu Trp Thr Leu Gly Glu Gly Gln Val Val Arg Val Lys  
 210 215 220

tat gga aat gca gat ggt gaa tac tgc aaa ttt ccc ttc tgg ttc aat 842  
 Tyr Gly Asn Ala Asp Gly Glu Tyr Cys Lys Phe Pro Phe Trp Phe Asn  
 225 230 235

ggt aag gaa tac aac agc tgc aca gat gca gga cgt aat gat gga ttc 890  
 Gly Lys Glu Tyr Asn Ser Cys Thr Asp Ala Gly Arg Asn Asp Gly Phe  
 240 245 250

ctc tgg tgt tcc aca acc aaa gac ttt gat gca gat ggc aaa tat ggc 938  
 Leu Trp Cys Ser Thr Thr Lys Asp Phe Asp Ala Asp Gly Lys Tyr Gly  
 255 260 265

ttt tgt ccc cat gag tca ctt ttt aca atg ggt ggc aat ggt gat gga 986  
 Phe Cys Pro His Glu Ser Leu Phe Thr Met Gly Gly Asn Gly Asp Gly  
 270 275 280 285

cag ccc tgc aag ttt ccc ttt aaa ttt caa ggc cag tcc tat gac cag 1034  
 Gln Pro Cys Lys Phe Pro Phe Lys Phe Gln Gly Gln Ser Tyr Asp Gln  
 290 295 300

tgt aca aca gaa ggc agg aca gat gga tac aga tgg tgt gga acc act 1082  
 Cys Thr Thr Glu Gly Arg Thr Asp Gly Tyr Arg Trp Cys Gly Thr Thr  
 305 310 315

gaa gac tat gat aga gat aag aaa tac gga ttc tgc cca gaa act gcc 1130  
 Glu Asp Tyr Asp Arg Asp Lys Lys Tyr Gly Phe Cys Pro Glu Thr Ala  
 320 325 330

atg tca aca gtt ggt gga aat tca gaa gga gct cct tgt gta ttc ccc 1178  
 Met Ser Thr Val Gly Gly Asn Ser Glu Gly Ala Pro Cys Val Phe Pro  
 335 340 345

ttc atc ttc ctt ggg aat aaa tac gac tcc tgt aca agt gca ggt cgc 1226  
 Phe Ile Phe Leu Gly Asn Lys Tyr Asp Ser Cys Thr Ser Ala Gly Arg  
 350 355 360 365

aat gat ggc aag ctg tgg tgt gct tct acc agc agc tat gat gat gac 1274  
 Asn Asp Gly Lys Leu Trp Cys Ala Ser Thr Ser Ser Tyr Asp Asp Asp  
 370 375 380

cgc aag tgg ggc ttt tgt cca gat caa gga tac agt ctc ttc ttg gtt	1322
Arg Lys Trp Gly Phe Cys Pro Asp Gln Gly Tyr Ser Leu Phe Leu Val	
385 390 395	
gct gcc cac gaa ttt ggc cat gcg atg gga tta gag cac tcc gag gac	1370
Ala Ala His Glu Phe Gly His Ala Met Gly Leu Glu His Ser Glu Asp	
400 405 410	
cca gga gct ctc atg gcc ccg atc tac acc tac acc aag aac ttc cgc	1418
Pro Gly Ala Leu Met Ala Pro Ile Tyr Thr Tyr Thr Lys Asn Phe Arg	
415 420 425	
ctt tct cag gat gac att aag ggg att cag gag cta tat gaa gta tca	1466
Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Glu Leu Tyr Glu Val Ser	
430 435 440 445	
cct gat gtg gaa cct gga cca ggg cca gga cca ggg cca gga cca cgt	1514
Pro Asp Val Glu Pro Gly Pro Gly Pro Gly Pro Gly Pro Gly Pro Arg	
450 455 460	
cct acc ctt gga cct gtc act cca gag ctc tgc aag cac gac att gta	1562
Pro Thr Leu Gly Pro Val Thr Pro Glu Leu Cys Lys His Asp Ile Val	
465 470 475	
ttt gat gga gtt gca caa att aga gga gaa ata ttt ttc ttc aaa gac	1610
Phe Asp Gly Val Ala Gln Ile Arg Gly Glu Ile Phe Phe Phe Lys Asp	
480 485 490	
aga ttc atg tgg agg act gta aac cct cga gga aaa ccc aca ggt cct	1658
Arg Phe Met Trp Arg Thr Val Asn Pro Arg Gly Lys Pro Thr Gly Pro	
495 500 505	
ctt ctc gtt gct aca ttc tgg cct gat ctg cca gag aaa atc gat gct	1706
Leu Leu Val Ala Thr Phe Trp Pro Asp Leu Pro Glu Lys Ile Asp Ala	
510 515 520 525	
gtc tac gag tcc cct cag gat gag aag gct gta ttt ttt gca gga aat	1754
Val Tyr Glu Ser Pro Gln Asp Glu Lys Ala Val Phe Phe Ala Gly Asn	
530 535 540	
gag tac tgg gtt tat aca gcc agc aac ctg gat agg ggc tat cca aag	1802
Glu Tyr Trp Val Tyr Thr Ala Ser Asn Leu Asp Arg Gly Tyr Pro Lys	
545 550 555	
aaa ctc acc agc ctg gga cta ccc cct gat gtg caa cgc att gat gca	1850
Lys Leu Thr Ser Leu Gly Leu Pro Pro Asp Val Gln Arg Ile Asp Ala	
560 565 570	
gcc ttc aac tgg ggc aga aac aag aag aca tat att ttc tct gga gac	1898
Ala Phe Asn Trp Gly Arg Asn Lys Lys Thr Tyr Ile Phe Ser Gly Asp	
575 580 585	
aga tac tgg aag tac aat gaa gaa aag aaa aaa atg gag ctt gca acc	1946
Arg Tyr Trp Lys Tyr Asn Glu Glu Lys Lys Lys Met Glu Leu Ala Thr	
590 595 600 605	
cca aaa ttc att gcg gat tct tgg aat gga gtt cca gat aac ctc gat	1994
Pro Lys Phe Ile Ala Asp Ser Trp Asn Gly Val Pro Asp Asn Leu Asp	
610 615 620	

gct gtc ctg ggt ctt act gac agc ggg tac acc tat ttt ttc aaa gac 2042  
Ala Val Leu Gly Leu Thr Asp Ser Gly Tyr Thr Tyr Phe Phe Lys Asp  
625 630 635

cag tac tat cta caa atg gaa gac aag agt ttg aag att gtt aaa att 2090  
Gln Tyr Tyr Leu Gln Met Glu Asp Lys Ser Leu Lys Ile Val Lys Ile  
640 645 650

ggc aag ata agt tct gac tgg ttg ggt tgc tga 2123  
Gly Lys Ile Ser Ser Asp Trp Leu Gly Cys  
655 660

<210> 24  
<211> 663  
<212> PRT  
<213> Gallus gallus

<400> 24  
Met Lys Thr His Ser Val Phe Gly Phe Phe Phe Lys Val Leu Leu Ile  
1 5 10 15

Gln Val Tyr Leu Phe Asn Lys Thr Leu Ala Ala Pro Ser Pro Ile Ile  
20 25 30

Lys Phe Pro Gly Asp Ser Thr Pro Lys Thr Asp Lys Glu Leu Ala Val  
35 40 45

Gln Tyr Leu Asn Lys Tyr Tyr Gly Cys Pro Lys Asp Asn Cys Asn Leu  
50 55 60

Phe Val Leu Lys Asp Thr Leu Lys Lys Met Gln Lys Phe Phe Gly Leu  
65 70 75 80

Pro Glu Thr Gly Asp Leu Asp Gln Asn Thr Ile Glu Thr Met Lys Lys  
85 90 95

Pro Arg Cys Gly Asn Pro Asp Val Ala Asn Tyr Asn Phe Phe Pro Arg  
100 105 110

Lys Pro Lys Trp Glu Lys Asn His Ile Thr Tyr Arg Ile Ile Gly Tyr  
115 120 125

Thr Pro Asp Leu Asp Pro Glu Thr Val Asp Asp Ala Phe Ala Arg Ala  
130 135 140

Phe Lys Val Trp Ser Asp Val Thr Pro Leu Arg Phe Asn Arg Ile Asn  
145 150 155 160

Asp Gly Glu Ala Asp Ile Met Ile Asn Phe Gly Arg Trp Glu His Gly  
165 170 175

Asp Gly Tyr Pro Phe Asp Gly Lys Asp Gly Leu Leu Ala His Ala Phe  
180 185 190

Ala Pro Gly Pro Gly Ile Gly Gly Asp Ser His Phe Asp Asp Asp Glu  
195 200 205

C1

Leu Trp Thr Leu Gly Glu Gly Gln Val Val Arg Val Lys Tyr Gly Asn  
 210 215 220  
 Ala Asp Gly Glu Tyr Cys Lys Phe Pro Phe Trp Phe Asn Gly Lys Glu  
 225 230 235 240  
 Tyr Asn Ser Cys Thr Asp Ala Gly Arg Asn Asp Gly Phe Leu Trp Cys  
 245 250 255  
 Ser Thr Thr Lys Asp Phe Asp Ala Asp Gly Lys Tyr Gly Phe Cys Pro  
 260 265 270  
 His Glu Ser Leu Phe Thr Met Gly Gly Asn Gly Asp Gly Gln Pro Cys  
 275 280 285  
 Lys Phe Pro Phe Lys Phe Gln Gly Gln Ser Tyr Asp Gln Cys Thr Thr  
 290 295 300  
 Glu Gly Arg Thr Asp Gly Tyr Arg Trp Cys Gly Thr Thr Glu Asp Tyr  
 305 310 315 320  
 Asp Arg Asp Lys Lys Tyr Gly Phe Cys Pro Glu Thr Ala Met Ser Thr  
 325 330 335  
 Val Gly Gly Asn Ser Glu Gly Ala Pro Cys Val Phe Pro Phe Ile Phe  
 340 345 350  
 Leu Gly Asn Lys Tyr Asp Ser Cys Thr Ser Ala Gly Arg Asn Asp Gly  
 355 360 365  
 Lys Leu Trp Cys Ala Ser Thr Ser Ser Tyr Asp Asp Asp Arg Lys Trp  
 370 375 380  
 Gly Phe Cys Pro Asp Gln Gly Tyr Ser Leu Phe Leu Val Ala Ala His  
 385 390 395 400  
 Glu Phe Gly His Ala Met Gly Leu Glu His Ser Glu Asp Pro Gly Ala  
 405 410 415  
 Leu Met Ala Pro Ile Tyr Thr Tyr Thr Lys Asn Phe Arg Leu Ser Gln  
 420 425 430  
 Asp Asp Ile Lys Gly Ile Gln Glu Leu Tyr Glu Val Ser Pro Asp Val  
 435 440 445  
 Glu Pro Gly Pro Gly Pro Gly Pro Gly Pro Gly Pro Arg Pro Thr Leu  
 450 455 460  
 Gly Pro Val Thr Pro Glu Leu Cys Lys His Asp Ile Val Phe Asp Gly  
 465 470 475 480  
 Val Ala Gln Ile Arg Gly Glu Ile Phe Phe Phe Lys Asp Arg Phe Met  
 485 490 495  
 Trp Arg Thr Val Asn Pro Arg Gly Lys Pro Thr Gly Pro Leu Leu Val  
 500 505 510  
 Ala Thr Phe Trp Pro Asp Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu  
 515 520 525

Ser Pro Gln Asp Glu Lys Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp  
 530 535 540  
 Val Tyr Thr Ala Ser Asn Leu Asp Arg Gly Tyr Pro Lys Lys Leu Thr  
 545 550 555 560  
 Ser Leu Gly Leu Pro Pro Asp Val Gln Arg Ile Asp Ala Ala Phe Asn  
 565 570 575  
 Trp Gly Arg Asn Lys Lys Thr Tyr Ile Phe Ser Gly Asp Arg Tyr Trp  
 580 585 590  
 Lys Tyr Asn Glu Glu Lys Lys Lys Met Glu Leu Ala Thr Pro Lys Phe  
 595 600 605  
 Ile Ala Asp Ser Trp Asn Gly Val Pro Asp Asn Leu Asp Ala Val Leu  
 610 615 620  
 Gly Leu Thr Asp Ser Gly Tyr Thr Tyr Phe Phe Lys Asp Gln Tyr Tyr  
 625 630 635 640  
 Leu Gln Met Glu Asp Lys Ser Leu Lys Ile Val Lys Ile Gly Lys Ile  
 645 650 655  
 Ser Ser Asp Trp Leu Gly Cys  
 660

<210> 25  
 <211> 631  
 <212> PRT  
 <213> Homo sapiens

<400> 25  
 Ala Pro Ser Pro Ile Ile Lys Phe Pro Gly Asp Val Ala Pro Lys Thr  
 1 5 10 15  
 Asp Lys Glu Leu Ala Val Gln Tyr Leu Asn Thr Phe Tyr Gly Cys Pro  
 20 25 30  
 Lys Glu Ser Cys Asn Leu Phe Val Leu Lys Asp Thr Leu Lys Lys Met  
 35 40 45  
 Gln Lys Phe Phe Gly Leu Pro Gln Thr Gly Asp Leu Asp Gln Asn Thr  
 50 55 60  
 Ile Glu Thr Met Arg Lys Pro Arg Cys Gly Asn Pro Asp Val Ala Asn  
 65 70 75 80  
 Tyr Asn Phe Phe Pro Arg Lys Pro Lys Trp Asp Lys Asn Gln Ile Thr  
 85 90 95  
 Tyr Arg Ile Ile Gly Tyr Thr Pro Asp Leu Asp Pro Glu Thr Val Asp  
 100 105 110  
 Asp Ala Phe Ala Arg Ala Phe Gln Val Trp Ser Asp Val Thr Pro Leu  
 115 120 125

Arg Phe Ser Arg Ile His Asp Gly Glu Ala Asp Ile Met Ile Asn Phe  
 130 135 140  
 Gly Arg Trp Glu His Gly Asp Gly Tyr Pro Phe Asp Gly Lys Asp Gly  
 145 150 155 160  
 Leu Leu Ala His Ala Phe Ala Pro Gly Thr Gly Val Gly Gly Asp Ser  
 165 170 175  
 His Phe Asp Asp Asp Glu Leu Trp Thr Leu Gly Glu Gly Gln Val Val  
 180 185 190  
 Arg Val Lys Tyr Gly Asn Ala Asp Gly Glu Tyr Cys Lys Phe Pro Phe  
 195 200 205  
 Leu Phe Asn Gly Lys Glu Tyr Asn Ser Cys Thr Asp Thr Gly Arg Ser  
 210 215 220  
 Asp Gly Phe Leu Trp Cys Ser Thr Thr Tyr Asn Phe Glu Lys Asp Gly  
 225 230 235 240  
 Lys Tyr Gly Phe Cys Pro His Glu Ala Leu Phe Thr Met Gly Gly Asn  
 245 250 255  
 Ala Glu Gly Gln Pro Cys Lys Phe Pro Phe Arg Phe Gln Gly Thr Ser  
 260 265 270  
 Tyr Asp Ser Cys Thr Thr Glu Gly Arg Thr Asp Gly Tyr Arg Trp Cys  
 275 280 285  
 Gly Thr Thr Glu Asp Tyr Asp Arg Asp Lys Lys Tyr Gly Phe Cys Pro  
 290 295 300  
 Glu Thr Ala Met Ser Thr Val Gly Gly Asn Ser Glu Gly Ala Pro Cys  
 305 310 315 320  
 Val Phe Pro Phe Thr Phe Leu Gly Asn Lys Tyr Glu Ser Cys Thr Ser  
 325 330 335  
 Ala Gly Arg Ser Asp Gly Lys Met Trp Cys Ala Thr Thr Ala Asn Tyr  
 340 345 350  
 Asp Asp Asp Arg Lys Trp Gly Phe Cys Pro Asp Gln Gly Tyr Ser Leu  
 355 360 365  
 Phe Leu Val Ala Ala His Glu Phe Gly His Ala Met Gly Leu Glu His  
 370 375 380  
 Ser Gln Asp Pro Gly Ala Leu Met Ala Pro Ile Tyr Thr Tyr Thr Lys  
 385 390 395 400  
 Asn Phe Arg Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Glu Leu Tyr  
 405 410 415  
 Gly Ala Ser Pro Asp Ile Asp Leu Gly Thr Gly Pro Thr Pro Thr Leu  
 420 425 430  
 Gly Pro Val Thr Pro Glu Ile Cys Lys Gln Asp Ile Val Phe Asp Gly  
 435 440 445

Ile Ala Gln Ile Arg Gly Glu Ile Phe Phe Phe Lys Asp Arg Phe Ile  
 450 455 460  
 Trp Arg Thr Val Thr Pro Arg Asp Lys Pro Met Gly Pro Leu Leu Val  
 465 470 475 480  
 Ala Thr Phe Trp Pro Glu Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu  
 485 490 495  
 Ala Pro Gln Glu Glu Lys Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp  
 500 505 510  
 Ile Tyr Ser Ala Ser Thr Leu Glu Arg Gly Tyr Pro Lys Pro Leu Thr  
 515 520 525  
 Ser Leu Gly Leu Pro Pro Asp Val Gln Arg Val Asp Ala Ala Phe Asn  
 530 535 540  
 Trp Ser Lys Asn Lys Lys Thr Tyr Ile Phe Ala Gly Asp Lys Phe Trp  
 545 550 555 560  
 Arg Tyr Asn Glu Val Lys Lys Lys Met Asp Pro Gly Phe Pro Lys Leu  
 565 570 575  
 Ile Ala Asp Ala Trp Asn Ala Ile Pro Asp Asn Leu Asp Ala Val Val  
 580 585 590  
 Asp Leu Gln Gly Gly Gly His Ser Tyr Phe Phe Lys Gly Ala Tyr Tyr  
 595 600 605  
 Leu Lys Leu Glu Asn Gln Ser Leu Lys Ser Val Lys Phe Gly Ser Ile  
 610 615 620  
 Lys Ser Asp Trp Leu Gly Cys  
 625 630

<210> 26  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide primer

<400> 26  
 attgaattct tctacagttc a

21

<210> 27  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:  
 Oligonucleotide primer

<400> 27  
atgggatcca ctgcaaattt c 21

<210> 28  
<211> 21  
<212> DNA  
<213> Artificial Sequence


<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 28  
gccggatcca tgaccagtgt a 21

<210> 29  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 29  
gtgggatccc tgaagactat g 21

 <210> 30  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 30  
aggggatcct taaggggatt c 21

<210> 31  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 31  
ctcggatcct ctgcaagcac g 21

<210> 32  
<211> 21  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 32

ctcggatcct ctgcaagcac g

21

<210> 33

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 33

gcaggatccg agtgctgggt ttatac

26

<210> 34

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 34

gcagaattca actgtggcag aaacaag

27

<210> 35

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 35

gtagaattcc agcactcatt tcctgc

26

<210> 36

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 36

tctgaattct gccacagttg aagg 24

<210> 37  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 37  
attgaattct tctacagttc a 21

<210> 38  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 38  
gatgaattct actgcaagtt 20

<210> 39  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
Oligonucleotide primer

<400> 39  
cactgaattc atctgcaaac a 21

<210> 40  
<211> 429  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Human MMP-2  
fusion protein

<400> 40  
Tyr Cys Lys Phe Pro Phe Leu Phe Asn Gly Lys Glu Tyr Asn Ser Cys  
1 5 10 15  
Thr Asp Thr Gly Arg Ser Asp Gly Phe Leu Trp Cys Ser Thr Thr Tyr  
20 25 30

Asn Phe Glu Lys Asp Gly Lys Tyr Gly Phe Cys Pro His Glu Ala Leu  
 35 40 45  
 Phe Thr Met Gly Gly Asn Ala Glu Gly Gln Pro Cys Lys Phe Pro Phe  
 50 55 60  
 Arg Phe Gln Gly Thr Ser Tyr Asp Ser Cys Thr Thr Glu Gly Arg Thr  
 65 70 75 80  
 Asp Gly Tyr Arg Trp Cys Gly Thr Thr Glu Asp Tyr Asp Arg Asp Lys  
 85 90 95  
 Lys Tyr Gly Phe Cys Pro Glu Thr Ala Met Ser Thr Val Gly Gly Asn  
 100 105 110  
 Ser Glu Gly Ala Pro Cys Val Phe Pro Phe Thr Phe Leu Gly Asn Lys  
 115 120 125  
 Tyr Glu Ser Cys Thr Ser Ala Gly Arg Ser Asp Gly Lys Met Trp Cys  
 130 135 140  
 Ala Thr Thr Ala Asn Tyr Asp Asp Asp Arg Lys Trp Gly Phe Cys Pro  
 145 150 155 160  
 Asp Gln Gly Tyr Ser Leu Phe Leu Val Ala Ala His Glu Phe Gly His  
 165 170 175  
 Ala Met Gly Leu Glu His Ser Gln Asp Pro Gly Ala Leu Met Ala Pro  
 180 185 190  
 Ile Tyr Thr Tyr Thr Lys Asn Phe Arg Leu Ser Gln Asp Asp Ile Lys  
 195 200 205  
 Gly Ile Gln Glu Leu Tyr Gly Ala Ser Pro Asp Ile Asp Leu Gly Thr  
 210 215 220  
 Gly Pro Thr Pro Thr Leu Gly Pro Val Thr Pro Glu Ile Cys Lys Gln  
 225 230 235 240  
 Asp Ile Val Phe Asp Gly Ile Ala Gln Ile Arg Gly Glu Ile Phe Phe  
 245 250 255  
 Phe Lys Asp Arg Phe Ile Trp Arg Thr Val Thr Pro Arg Asp Lys Pro  
 260 265 270  
 Met Gly Pro Leu Leu Val Ala Thr Phe Trp Pro Glu Leu Pro Glu Lys  
 275 280 285  
 Ile Asp Ala Val Tyr Glu Ala Pro Gln Glu Glu Lys Ala Val Phe Phe  
 290 295 300  
 Ala Gly Asn Glu Tyr Trp Ile Tyr Ser Ala Ser Thr Leu Glu Arg Gly  
 305 310 315 320  
 Tyr Pro Lys Pro Leu Thr Ser Leu Gly Leu Pro Pro Asp Val Gln Arg  
 325 330 335

Val Asp Ala Ala Phe Asn Trp Ser Lys Asn Lys Lys Thr Tyr Ile Phe  
340 345 350

Ala Gly Asp Lys Phe Trp Arg Tyr Asn Glu Val Lys Lys Lys Met Asp  
355 360 365

Pro Gly Phe Pro Lys Leu Ile Ala Asp Ala Trp Asn Ala Ile Pro Asp  
370 375 380

Asn Leu Asp Ala Val Val Asp Leu Gln Gly Gly Gly His Ser Tyr Phe  
385 390 395 400

Phe Lys Gly Ala Tyr Tyr Leu Lys Leu Glu Asn Gln Ser Leu Lys Ser  
405 410 415

Val Lys Phe Gly Ser Ile Lys Ser Asp Trp Leu Gly Cys  
420 425

<210> 41  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Fmoc modified.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> OBut1 modified at position 3.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Methylated valine at position 5.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Valine with a carboxy terminal ONa.

<400> 41  
Arg Gly Asp Phe Val  
1 5

<210> 42  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Fmoc modified

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> OButyl modified in position 3.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Methylated valine in position 5.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Valine with a hydroxyl group.

<400> 42  
Arg Gly Asp Phe Val  
1 5

<210> 43  
<211> 5  
<212> PRT  
<213> Artificial Sequence

C<sup>1</sup>  
<220>  
<223> Description of Artificial Sequence: peptide

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> OButl modified at position 3.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Methylated valine at position 5.

<220>  
<221> PEPTIDE  
<222> (1)..(5)  
<223> Valine with a hydroxyl group.

<400> 43  
Arg Gly Asp Phe Val  
1 5